

**Comments on the JECO Caribbean Inc. report
*Conservation and Development Strategy: Grenada Dove and Four Seasons
Resort Project, Mt. Hartman Estate, Grenada (November 2006)***

The Conservation and Development Strategy written by Dr Valma Jessamy is what the developer has termed an "Environmental Assessment" for the proposed Four Seasons resort development on the Mount Hartman Estate, Grenada (i.e. it is not necessarily government-endorsed or meeting legal EIA requirements).

An Environmental Assessment for a major development impacting on c.50% of a Critically Endangered species' population and within a legally designated National Park would be expected to follow rigorous terms of reference that should include at least:

- An assessment of all biodiversity species of special conservation interest that are known occur in the development area (including the Grenada Dove and Grenada race of Hook-billed Kite, among others)
- An up-to-date estimate of the Grenada Dove population on the lands within, and immediately adjacent to the development area
- A mapped assessment of existing habitat (and areas of potential habitat restoration) potential habitat, with rehabilitation actions) that is of quantified importance to the species of special conservation interest (including viable populations of the Grenada Dove)
- A map of the development area detailing (with technical justification) suggested land-use zones based on biodiversity importance, environmental sensitivity and development potential
- An evaluation of the development proposal with recommendations for changes necessary to avoid any further loss of Grenada Doves (or other species of special conservation interest), or even to enhance populations of such species.

The "Environmental Assessment" fails to meet any of these basic expectations. Specific areas of concern (most of which are concerning due to the omission of critical information or analysis) are:

Development threats and impacts on biodiversity

The report makes no assessment of threat or impact. It is clear from the plans that a large number of villas will be built close to the "Primary Reserve" (set aside to protect the Grenada Dove), and that actual and potential dove habitat will be converted to villas, golf course or resort infrastructure. Such conversion of habitat and proximity of development will have impacts.

There is no updated distribution and population assessment for the Critically Endangered Grenada Dove. The last assessment was done in December 2004, just after hurricane Ivan since when the habitat will have changed significantly and individual

territories may have changed. With out presentation of mapped Dove territories, no assessment can be made as to the initial impact of the development on the Dove population.

However, it is clear habitat loss from the development will impact on the Dove, but even this is not stated in the report. Similarly, there is no biodiversity assessment (mapped or otherwise) through which the impact of the development can be evaluated for any other species of global or local conservation interest, such as the Grenada Hook-billed Kite.

Secondary impacts of development are also not mentioned. The Grenada Dove is a predominantly ground-dwelling species, and thus will be vulnerable to predation from free-roaming cats and dogs (both of which will be present due to the close proximity of the villas to the "Primary Reserve"). There will also likely be and increase in the population of non-native mongoose, attracted to the golf courses abundant fresh water (and waste food from the hotel and villas).

Conservation importance of Mount Hartman

The conservation importance of Mount Hartman is understated. Using pre-Hurricane Ivan data for the total Grenada Dove population, the report estimates that Mount Hartman National Park supports "just" 22% of the global population. Post-hurricane data (December 2004) suggest that the National Park supports 33-34% of the global population. More importantly though, the Estate as a whole (i.e. the development area) supports 53-55% of the population (post-hurricane data: pre-hurricane it was 33%). This emphasizes the critical importance of the Mount Hartman estate as the only area with enough habitat to sustain a viable population of the Grenada Dove. Any development that would eliminate or degrade a significant portion of the habitat would quite probably lead to this bird's eventual extinction.

The Grenada Dove

There is very limited habitat available for the Grenada Dove. Like many Caribbean species it is adapted to some degree of disturbance and disturbed habitats, but it does require good secondary forest with a reasonably high canopy such as is found in the Mount Hartman Estate (and National Park). This is why over 50% of the world population of the Dove is supported by forest on the Estate. The existing National Park is fragmented into three (albeit viable) patches, and human activities have degraded these areas to some extent. The concept of addressing the existing degradation, linking the three areas and increasing the area of protected (current) Dove habitat as set out in the report is a good one. However, this will require resources and an appropriate management entity (such as Forestry Department) to ensure effective implementation, and this is not discussed. What the corridors will NOT do though (as apparently suggested in the report) is help establish Doves in areas that they currently do not occupy. If the Dove is currently NOT in a particular area it suggests that the habitat is suboptimal and survivorship of birds within it will be minimal.

Alternative options

There is no analysis of alternative options for development or conservation. With just one proposed development option, there is no mention of alternatives that could be much more

beneficial to biodiversity, such as re-defining the Primary Reserve to include more Grenada Dove habitat, increasing the buffer zone and corridor widths, reducing the area to be covered by villas (especially in area adjacent to Dove habitat), or even leaving out the golf course (which would free up a land, some of which could be reforested as future Grenada Dove habitat).

Conservation implementation

The report makes no reference to how the Primary Reserve land would actually remain protected in perpetuity. There is no discussion as to who would be responsible for protection, management, and monitoring of the habitat and its species of conservation interest (including the Grenada Dove). Similarly there is no mention of where the funds for management activities would come from, whether the Primary Reserve land will remain within the (redefined) National Park boundaries, and if not, what legal and practical mechanisms would ensure its long-term protection.

Other issues

- The report makes no mention of consultation with the Forestry and National Parks Department (the current managers of Mount Hartman National Park)
- There are no suggested rules for the developers/ construction teams, e.g. the need to use native plants in landscaping, the need for minimal clearance of vegetation etc.
- There is a lack of clarity as to exactly what and where the "Primary Reserve" is, or how many pairs of Doves will be within it
- Contrary to suggestions within the report, there is a strong existing national awareness of the Grenada Dove. It was the focus of a RARE Pride social marketing campaign, and the Dove features on signs, logos etc. in abundance